AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) A method of maintaining neighbor list information in a wireless communication system, comprising:

maintaining a separate neighbor list for each of a plurality of cells, said neighbor lists indicating neighbor cells and corresponding control channels;

maintaining a central link-list database identifying, for each of said plurality of cells, the neighbor cells and corresponding control channels;

receiving a neighbor modification command responsive to a change in a system architecture associated with said wireless communication system;

automatically identifying which of said neighbor lists should be modified as affected neighbor lists based on said central link-list database in response to said command;

automatically modifying a plurality of said affected neighbor lists in response to said command by performing at least one of the following:

automatically deleting at least one neighbor relation from each of said plurality of affected neighbor lists in response to said command;

automatically adding at least one neighbor relation to each of said plurality of the affected neighbor lists in response to said command; and

automatically changing at least one control channel identified in each of said plurality of affected neighbor lists in response to said command; and

automatically modifying said central link-list database in response to said command.

2.   (Original) The method of claim 1 wherein automatically modifying a plurality of said affected neighbor lists in response to said command comprises automatically deleting at least one control channel from each said affected neighbor list.

3.   (Original) The method of claim 2 wherein automatically deleting at least one control channel from each said affected neighbor list comprises automatically deleting at least one control channel from a neighbor channel sub-list of each said affected neighbor list..

4.   (Original) The method of claim 1 wherein automatically modifying a plurality of said affected neighbor lists in response to said command comprises automatically deleting at least one neighbor relation and at least one control channel from each said affected neighbor list.

5.   (Original) The method of claim 4 wherein automatically deleting at least one neighbor relation and at least one control channel from each said affected neighbor list comprises automatically deleting at least one control channel from a neighbor channel sub-list and automatically deleting at least one neighbor relation from a neighbor cell sub-list of each said affected neighbor list.

6.   (Original) The method of claim 1 wherein automatically modifying a plurality of said affected neighbor lists in response to said command comprises automatically updating at least one control channel in each said affected neighbor list.

7.   (Original) The method of claim 6 wherein automatically updating at least one control channel from each said affected neighbor list comprises automatically deleting at least one control channel from a neighbor channel sub-list and automatically adding another control channel to said neighbor channel sub-list of each said affected neighbor list.

8.   (Original) The method of claim 1 wherein automatically modifying a plurality of said affected neighbor lists in response to said command comprises automatically updating at least one neighbor relation and at least one control channel in each said affected neighbor list.

9.   (Original) A method of maintaining neighbor list information in a wireless communication system, comprising:

receiving a delete neighbor command identifying a first cell;

automatically identifying a plurality of neighbor lists that should be modified in response to said command; and

automatically deleting at least a neighbor relation to said first cell and at least one control channel identifier from a plurality of said identified neighbor lists in response to said command.

10.   (Original) The method of claim 9 wherein automatically identifying a plurality of neighbor lists that should be modified in response to said command comprises automatically identifying a plurality of neighbor lists that should be modified in response to said command based on a central link-list database that identifies neighbor cells and corresponding control channels for a plurality of cells.

11.   (Original) The method of claim 9 wherein automatically deleting at least a neighbor relation to said first cell and at least one control channel identifier from a plurality of said identified neighbor lists in response to said command comprises automatically deleting at least one control channel from a neighbor channel sub-list and automatically deleting at least the neighbor relation to said first cell from a neighbor cell sub-list of each said identified neighbor lists.

12.   (Original) A method of maintaining neighbor list information in a wireless communication system, comprising:

receiving a change neighbor command identifying a first cell;

automatically identifying a plurality of neighbor lists that should be modified in response to said command; and

automatically changing a control channel identifier associated with said first cell in a plurality of said identified neighbor lists in response to said command.

13.   (Original) The method of claim 12 wherein automatically identifying a plurality of neighbor lists that should be modified in response to said command comprises automatically identifying a plurality of neighbor lists that should be modified in response to said command based on a central link-list database that identifies neighbor cells and corresponding control channels for a plurality of cells.

14.   (Original) The method of claim 12 wherein automatically changing a control channel . identifier associated with said first cell in a plurality of said identified neighbor lists in response to said command comprises automatically deleting at least one control channel from a neighbor channel sub-list and automatically adding another control channel to said neighbor channel sub-list of each said identified neighbor lists.

15.   (Withdrawn) A wireless communication system, comprising:

at least one base station controller coupled to a plurality of radio base stations to

provide wireless communications to a plurality of cells, each of said cells having

at least one neighbor cell and a control channel;

a neighbor list for each of said cells identifying that cell's neighbor cells and their

corresponding control channels;

a central link-list database identifying the neighbor cells and corresponding control

channels for each of said plurality of cells;

said base station controller operative to receive a neighbor modification command

and respond thereto by:

automatically identifying which of said neighbor lists should be modified as

affected neighbor lists based on said central link-list database;

automatically modifying a plurality of said affected neighbor lists; and

automatically modifying said central link-list database.

16.   (Withdrawn) The system of claim 15 wherein said neighbor modification command is a delete neighbor command identifying a first cell and wherein said base station controller is operative to respond to said delete neighbor command by:

automatically identifying which of said neighbor lists should be modified as affected

neighbor lists based on said central link-list database;

automatically deleting at least a neighbor relation to said first cell and an at least one

control channel identifier from a plurality of said affected neighbor lists; and

automatically modifying said central link-list database.

17.   (Withdrawn) The system of claim 15 wherein said neighbor modification command is a change neighbor command identifying a first cell and wherein said base station controller is operative to respond to said change neighbor command by:

automatically identifying which of said neighbor lists should be modified as affected

neighbor lists based on said central link-list database;

automatically changing at least one control channel identifier in a plurality of said

affected neighbor lists; and

automatically modifying said central link-list database.

18.   (Withdrawn) A base station controller coupled to a plurality of radio base stations to provide wireless communications to a plurality of cells, each of the cells having at least one neighbor cell and a control channel, comprising:

a central link-list database identifying the neighbor cells and corresponding control

channels for each of said plurality of cells;

a separate neighbor list for each of said cells identifying that cell's neighbor cells and

their corresponding control channels;

wherein said base station controller is programmed to respond to a received

neighbor modification command by:

    automatically identifying which of said neighbor lists should be modified as

        affected neighbor lists based on said central link-list database;

    automatically modifying a plurality of said affected neighbor lists; and

    automatically modifying said central link-list database.

19.   (Withdrawn) A computer readable medium comprising a computer readable program

embodied therein for a base station controller, the base station controller coupled to a plurality

of radio base stations to provide wireless communications to a plurality of cells, each of the cells

having at least one neighbor cell and a control channel, said base station controller having

access to a separate neighbor list for each of said cells identifying that cell's neighbor cells and

their corresponding control channels and access to a central link-list database identifying the

neighbor cells and corresponding control channels for each of said plurality of cells, the

computer readable program comprising:

    computer readable program code that responds to receipt of a neighbor modification

        command by automatically identifying which of a plurality of the neighbor lists

        should be modified as affected neighbor lists based on the central link-list

        database;

    computer readable program code that automatically modifies said affected neighbor

        lists in response to said command; and

    computer readable program code that modifies the central link-list database in

        response to said command.

20. (New) The method of claim 1 wherein automatically modifying said central link-list

database comprises performing at least one of the following:

automatically deleting at least one cell relationship from said central link-list database

in response to said command;

automatically adding at least one cell relationship to said central link-list database in

response to said command; and

automatically changing at least one control channel identified in said central link-list

database in response to said command.